Appendix C
Habitat Suitability Evaluation, Arborist Report, and Delhi Sands Flower-loving Fly Habitat Suitability Evaluation

FONTANA FOOTHILLS COMMERCE CENTER
DRAFT EIR

Habitat Suitability Evaluation

ECOLOGICAL SCIENCES, inc.

April 15, 2020

Chad Manista
REDA Acquisitions, LLC
4450 MacArthur Blvd., Ste. 100
Newport Beach, CA 92660

SUBJECT: ***Results of a Habitat Suitability Evaluation, ±33-acre Site, City of Fontana, San Bernardino County, California***

Dear Chad:

This letter report presents findings of a reconnaissance-level survey conducted to generally evaluate the suitability of a ±33-acre site to support special-status biological resources in support of the environmental review process.

Introduction

The study area is regionally located in San Bernardino County, California (***Plate 1***). Specifically, the project site is located in the City of Fontana (City), generally south of Santa Ana Avenue, east of Juniper Avenue, north of Jurupa Avenue, and west of Sierra Avenue. The site occurs on the "Fontana" USGS 7.5-minute topographic map (***Plate 2***). The site occurs on the "Fontana" 7.5-minute USGS Quadrangle Map, Township 1 South, Range 5 West, Section 30. Projects proposed in this area that contain potentially suitable habitat to support sensitive biological resources must demonstrate to reviewing agencies that potential project-related impacts to sensitive biological resources are adequately addressed and mitigated pursuant to the California Environmental Quality Act (CEQA) and the federal Endangered Species Act (Act) of 1973, as amended. Accordingly, results of this habitat suitability evaluation are intended to provide the applicant and resource agencies with preliminary biological information required for planning and permitting decisions concerning the proposed project. Due to the inherent limitations of unseasonal or habitat-based data, definitive conclusions regarding the actual presence or absence of certain sensitive biological resources cannot necessarily be made in this report. Therefore, conclusions relative to potential presence or absence of selected sensitive biological resources are based solely on the nature of habitat present.

Regulatory Setting

Biological resources within the project site may fall under the jurisdiction of several federal and state agencies, including, but not necessarily limited to, California Department of Fish and Wildlife/Game (CDFW/CDFG), U.S. Fish and Wildlife Service (FWS), County of San Bernardino (County), City of Fontana (City), Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE). Potential constraints posed by biological resources upon the project site were generally evaluated by ranking the following sensitive biological issues, listed in descending order of significance: (1) a federally or state-listed endangered or threatened species of plant or animal; (2) streambeds, wetlands, and their associated vegetation; (3) habitats suitable to support a federally or state-listed endangered or threatened species of plant or wildlife; (4) species designated as candidates for federal listing; (5) habitat, other than wetlands, considered sensitive by regulatory agencies or resource conservation organizations; and (6) other species or issues of special concern to agencies, resource conservation organizations, or other

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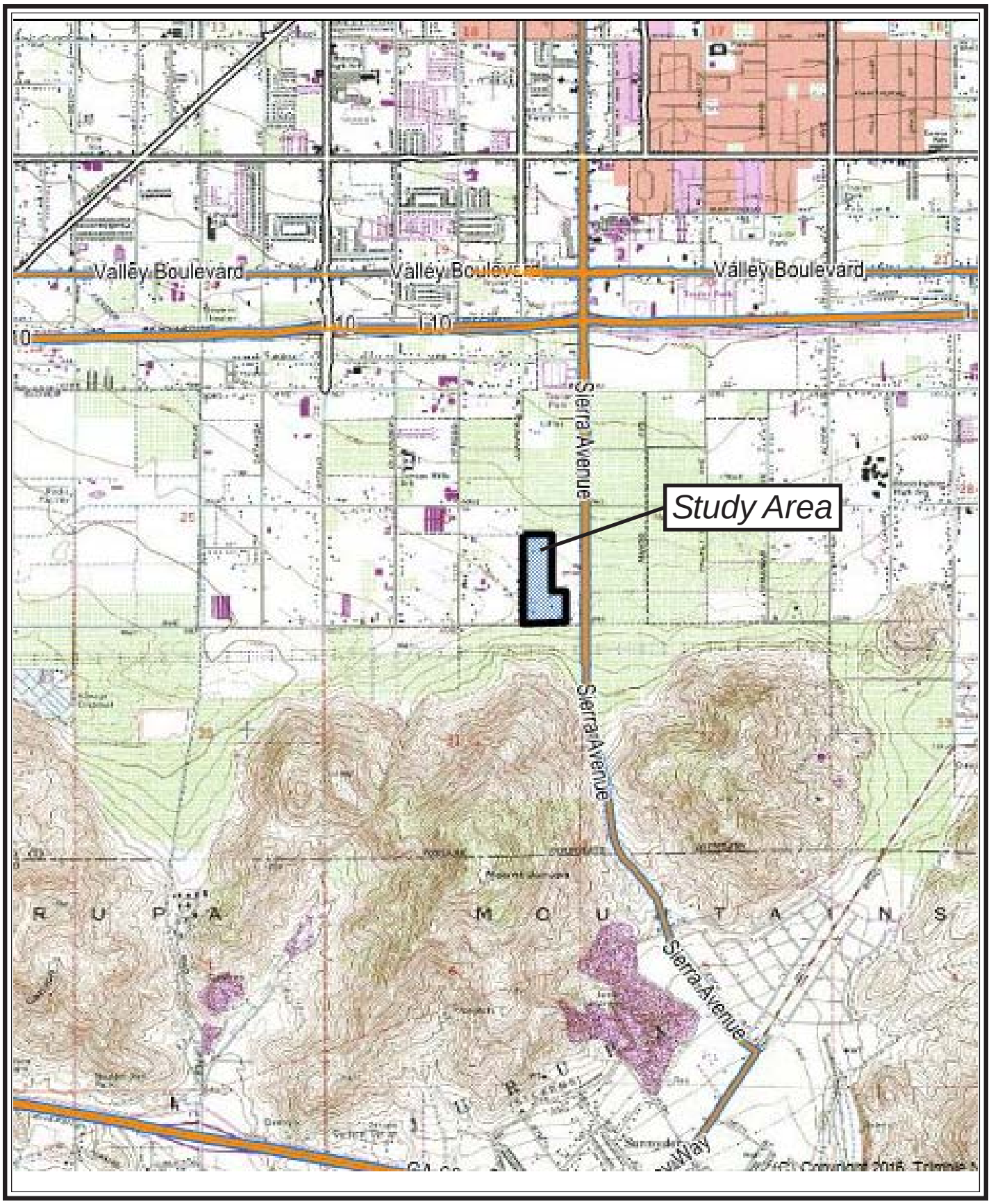

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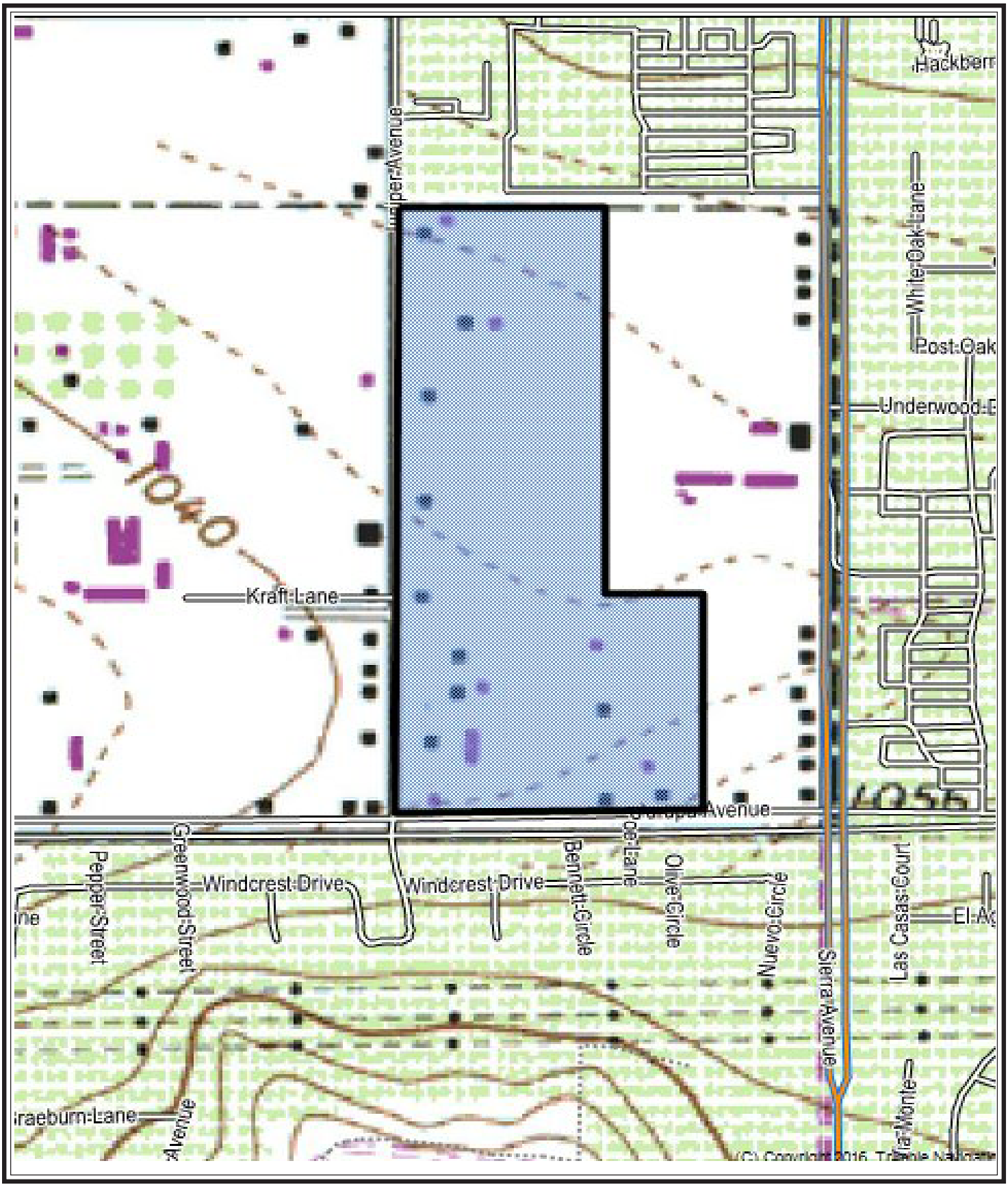
plate **1**

Regional Site Location

33-acre Fontana Site



= Study Area Boundary

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plate **2**

Site Vicinity

33-acre Fontana Site

interest groups. This analysis of biological resources is based on information compiled through field reconnaissance, extensive literature review, and by applicable reference materials. Methods used in this study are outlined below.

Methodology

Literature Search

Documentation pertinent to the biological resources in the vicinity of the site was reviewed and analyzed. Primary data sources reviewed to evaluate the occurrence potential of special-status resources on the subject site, included, but were not necessarily limited to: (1) California Natural Diversity Data Base (CNDDB 2019) and (2) California Native Plant Society (CNPS) online inventory for the "Fontana" U.S. Geological Survey (USGS) 7.5-minute quadrangle map along with in-house unpublished date for the site vicinity, (3) available literature pertaining to habitat requirements of special-status species potentially occurring in the project site; and (4) distribution data contained in Hall (1981); Grinnell and Miller (1944); Garrett and Dunn (1981); Holland (1986); Stebbins (1985); Hickman (1993); and CNPS (2001).

2019 Habitat Suitability Evaluation

Ecological Sciences conducted a reconnaissance-level field survey on the subject site to evaluate potential habitat for special-status resources on October 5, 2019. The site was examined on foot (transects) where access allowed. Several locked gates required binoculars for assessment. Dominant plant species, as well as other habitat characteristics present at the site were identified/evaluated to assess the overall habitat value. Weather conditions included relatively clear skies, 1-2 breezes, and ambient temperatures of 73-75ºF.

Existing Biological Environment

The study area is characterized by rural residential development, agriculture, and other anthropogenic activities. Because of substantial and long-standing impacts, the vegetative component is mostly ruderal with ornamental species. Residential structures (occupied and abandoned), out buildings, gravel parking areas, disced fields, equestrian areas, corals, vacant fields, irrigated pastures, nurseries, cultivated lawns, and agricultural occur throughout the study area. Extensive debris dumping is evident throughout the site. Surrounding land uses include areas similar to the subject site such as agricultural, residential, and commercial. ***Plate 3*** schematically illustrates site features. ***Plates 4a-4c*** illustrate representative habitat types present on site.

Vegetation

Ruderal plants recorded included various non-native grasses and weedy species such as foxtail chess (*Bromus madritensis spp. rubens*), ripgut grass (*Bromus diandrus*), Russian thistle (*Salsola tragus*), mustard (*Brassica/Hirschfeldia* spp.), cheeseweed (*Malva parviflora*), filaree (*Erodium sp.*), common sow thistle (*Sonchus oleraceus*), pigweed (*Amaranthus albus*), jimsonweed (*Datura wrightii*), castor bean (*Ricinus communis*), fleabane (*Conyza bonariensis),* and oleander (*Nerium oleander*). Native species such as telegraph weed (*Heterotheca grandiflora*), California croton (*Croton californicus*), dove weed (*Croton setiger*), horseweed (*Conyza canadensis*), and common sunflower (*Helianthus annuus*) were also recorded. Exotic or cultivars recorded on site included gum trees and windrows (*Eucalyptus* spp.), pepper trees (*Schinus molle*), olive (*Olea* sp.), palms (*Washingtonia* sp. and *Phoenix* sp.), pines (*Pinus* spp.), juniper (*Juniperus* spp.), salt cedar (*Tamarix* sp.), sweet gum (*Liquidambar styraciflua*), tree-of-heaven (*Ailanthus glandulosa*), and many other ornamental species. Vegetative cover was mostly dense (90-100%) absent the scraped/disced areas that were mostly barren.

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= Study Area
= Dense Ruderal
= Ruderal
= Nursery
= Rural Residential
= Scraped/Disced

plate **3**

Site Features Schematic

33-acre Fontana Site

View to south

View to east

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plate **4a**

Site Photographs

33-acre Fontana Site

View to north

View to west

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plate **4b**

Site Photographs

33-acre Fontana Site

View to east

View to west

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plate **4c**

Site Photographs

33-acre Fontana Site

General Soils Analysis / Soil Conservation Map Review

A review of soil maps prepared for the area by the Natural Resource Conservation Service (NRCS 2019) indicate that the subject site is located within an area mapped entirely as containing Delhi fine sands (Db). Various long-standing anthropogenic site disturbances have significantly altered the site's mapped surface soil characteristics.

Sensitive Biological Resources Evaluation

Discussed in this section are plant and wildlife species potentially present in the study area that have been afforded special recognition by federal or state agencies. The focus of this discussion is on those species that would potentially pose considerable constraints on the proposed project because of their high sensitivity status (listed or proposed for listing as rare, threatened, or endangered) with state and/or federal resource agencies. In addition, plants included on Lists 1, 2, 3, or 4 of the CNPS inventory are also considered of special-status. Vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife and considered sensitive by state and/or federal resource agencies are also generally discussed.

In general, those species presented in ***Tables 1 and 2*** that are "not expected" or that have a "low occurrence potential" generally correspond to "less than significant" under CEQA. The occurrence potential of special-status plant and wildlife species is primarily based on habitat types present, occurrence records of sensitive species from the site vicinity, and results of the on-site reconnaissance survey. No focused botanical or zoological surveys were conducted.

Special-Status Plant Species

No special-status plant species were detected on site during the reconnaissance survey and none are expected due to lack of suitable habitat. Special-status plant species known from the region that potentially occur within the project site are summarized below in ***Table 1***.

Table 1

Special-Status Plant Species Known to Occur in the Site Vicinity[1]

Common Name *Scientific Name*	**Status**			**Habitat Requirements**	**Occurrence Potential**
	Federal	**State**	**CNPS**		
Coulter's saltbush *Atriplex coulteri*	--	--	1.B	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland; sometimes associated with alkaline low places and clay soil.	**Not Expected:** suitable habitat not present
Plummer's mariposa lily *Calochortus plummerae*	FSC	--	1.B	Chaparral, cismontane woodlands, coastal scrub, Lower coniferous forests, and grasslands; associated with granitic soils.	**Not Expected**: suitable habitat not present on site
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	FSC	--	1.B	Chaparral, coastal scrub, grasslands; often associated with dry, rocky, open slopes.	**Not Expected:** suitable habitat not present on site
Parry's spineflower *Chorizanthe parryi* ssp. *parryi*	FSC	--	3	Chaparral and coastal scrub; associated with sandy or rocky openings.	**Not Expected:** suitable habitat not present
Many-stemmed dudleya *Dudleya multicaulis*	FSC	--	1.B	Chaparral, coastal scrub, and grasslands; often associated with clay soils.	**Not Expected:** suitable habitat not present
Santa Ana River woollystar *Eriastrum densifolium* ssp. *sanctorum*	FE	CE	1.B	Coastal scrub, chaparral, and alluvial scrub; associated with sandy soil in river floodplains or terraced fluvial deposits.	**Not Expected:** suitable habitat not present

Table 1-continued

Special-Status Plant Species Known to Occur in the Site Vicinity[1]

Common Name *Scientific Name*	Status Federal	 State	 CNPS	Habitat Requirements	Occurrence Potential
Pious daisy *Erigeron breweri* var. *bisanctus*	--	--	1.B	Chaparral and lower montane coniferous forest.	**Not Expected:** suitable habitat not present
Smooth tarplant *Hemizonia pungens* ssp. *laevis*	FSC	--	1.B	Chenopod scrub, meadows, playas, riparian woodland, and valley and foothill grasslands; associated with alkaline areas.	**Not Expected:** suitable habitat not present
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	--	--	1.B	Chaparral and coastal scrub; associated with dry soils; known to occur on roadsides.	**Not Expected:** suitable habitat not present
California muhly *Muhlenbergia californica*	--	--	1.B	Chaparral, coastal scrub, lower montane coniferous forest, and meadows; associated with moist soils, seeps, and streambanks.	**Not Expected:** suitable habitat not present
Salt spring checkerbloom *Sidalcea neomexicana*	--	--	2	Chaparral, coastal scrub, lower montane coniferous forest, Mohavean desert scrub, coastal brackish marsh, and alkali playas, seeps, and marshes; associated with moist, alkaline soils.	**Not Expected:** suitable habitat not present

KEY: [1]Based primarily on review of 2019 CNDDB and CNPS online databases

Federal
FE: Federally Endangered
FT: Federally Threatened Species
FPE: Federally Proposed Endangered
FPT: Federally Proposed Threatened
FC: Federal Candidate Species
FSC: Federal Species of Concern- no formal protection is granted to this designation

State
CE: State Endangered
CT: State Threatened
CR: State Rare

CNPS
List 1.A: Plants presumed extinct in California.
List 1.B: Plants rare and endangered in California and elsewhere
List 2: Plants rare and endangered in California, but more common elsewhere
List 3: Taxa about which more information is needed
List 4: Plants of limited distribution

Special-Status Wildlife Species

No special-status wildlife species were directly observed on site, although several have the potential to occur (e.g., those with a moderate occurrence potential). Most remaining potentially occurring sensitive wildlife species are not expected to occur on site due to lack of suitable habitat and existing development. Sensitive wildlife species known from the site vicinity that potentially occur are summarized below in ***Table 2***.

Table 2

Special-Status Wildlife Species Known from the Site Vicinity[1]

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Occurrence Potential
INVERTEBRATES				
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	--	Open, sandy (Delhi) dune areas commonly supporting buckwheat, croton, telegraph weed, *Camissonia* and *Oenothera*.	**Not Expected:** habitat present not suitable for sustained DSFF population
REPTILES				
San Diego horned lizard *Phrynosoma coronatum blainvillii*	FSC	CSC	Relatively open grasslands, scrublands, and woodlands with fine, loose soil.	**Low Potential:** marginally suitable habitat present

Table 2-continued

Special-Status Wildlife Species Known from the Site Vicinity[1]

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Occurrence Potential
Silvery legless lizard *Anniella pulchra pulchra*	FSC	CSC	Stabilized dunes, beaches, dry washes, pine, oak, and riparian woodlands, and chaparral; sparse vegetation with sandy or loose, loamy soils.	**Not Expected:** no suitable habitat present
San Bernardino ringneck snake *Diadophis punctatus modestus*	FSC	--	Woodlands, grassland, chaparral, and scrub habitats; often found in mesic areas under rocks, logs, and debris.	**Not Expected:** no suitable habitat present
BIRDS				
White-tailed kite (nesting) *Elanus leucurus*	MNBMC	CFP	Open vegetation and uses dense woodlands for cover.	**Low Potential:** possibly forages over the site; no suitable nesting habitat present
Northern harrier (nesting) *Circus cyaneus*	--	CSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	**Low Potential:** possibly forages over the site; no suitable nesting habitat present
Sharp-shinned hawk (nesting) *Accipiter striatus*	--	♦	Woodlands and forages over dense chaparral and scrublands.	**Low Potential:** possibly forages over the site as seasonal winter migrant; no suitable nesting habitat present
Cooper's hawk (nesting) *Accipiter cooperi*	--	♦	Dense stands of live oaks and riparian woodlands.	**Moderate Potential:** possibly forages over the site
Ferruginous hawk (wintering) *Buteo regalis*	FSC, MNBMC	♦	Grasslands, agricultural fields, and open scrublands.	**Low Potential:** possibly forages over the site as seasonal migrant; does not breed in area
Golden eagle (nesting & wintering) *Aquila chrysaetos*	--	♦, CFP	Mountains, deserts, and open country.	**Low Potential:** species known from project vicinity and may forage over the site; no suitable nesting habitat present
Prairie falcon (nesting) *Falco mexicanus*	--	CSC	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter.	**Low Potential:** may forage over the site in winter; no suitable nesting habitat present
Burrowing owl (burrow sites) *Athene cunicularia*	FSC, MNBMC	CSC	Grasslands and open scrub.	**Moderate Potential:** suitable habitat present
California horned lark *Eremophila alpestris actia*	--	♦	Grasslands, disturbed areas, agriculture fields, and beach areas.	**Low-Moderate Potential:** suitable foraging habitat present
Loggerhead shrike *Lanius ludovicianus*	FSC, MNBMC	CSC	Grasslands with scattered shrubs, trees, fences or other perches.	**Low Potential:** marginally suitable habitat present
Coastal California gnatcatcher *Polioptila californica californica*	FT	CSC	Coastal sage scrub in areas of flat or gently sloping terrain	**Not Expected:** suitable habitat not present
Mountain plover *Charadrius montanus*	--	CSC	Agricultural areas, fallow fields, grasslands, prairies	**Not Expected:** no suitable habitat present
MAMMALS				
San Diego desert woodrat *Neotoma lepida intermedia*	--	CSC	Moderate to dense sage scrub; rocky outcrops	**Not Expected:** no suitable habitat present
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	FSC	CSC	Chaparral, coastal scrub, grasslands	**Low Potential: m**arginally suitable habitat present

Table 2-continued

Special-Status Wildlife Species Known from the Site Vicinity[1]

Common Name *Scientific Name*	Status Federal	 State	Habitat Requirements	Occurrence Potential
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	FSC	CSC	Grasslands and coastal sage scrub; prefers lower elevational areas with open ground and sandy soils.	**Not Expected:** suitable habitat not present
San Bernardino kangaroo rat *Dipodomys merriami parvus*	FE	CSC	Coastal sage scrub; prefers lower elevational areas with open ground and sandy soils.	**Not Expected:** suitable habitat not present

KEY: [1]Based primarily on review of 2019 CNDDB; (nesting) = For most taxa the CNDDB is interested in sightings for the presence of resident populations. For some species (primarily birds), the CNDDB only tracks certain parts of the species range or life history (e.g., nesting locations). The area or life stage is indicated in parenthesis after the common name.

Status:

Federal—U.S. Fish and Wildlife Service

FE: Federally Endangered
FT: Federally Threatened
FPE: Federally Proposed Endangered
FPT: Federally Proposed Threatened
FC: Federal Candidate for listing as threatened or endangered
FSC: Federal Species of Concern- no formal protection is granted to this designation
MNBMC: Migratory Nongame Birds of Management Concern- protected by the Migratory Bird Treaty Act (FWS 1985)

State—California Department of Fish and Wildlife

CE: California Endangered
CT: California Threatened
CCE: California Candidate (Endangered)
CCT: California Candidate (Threatened)
CFP: California Fully Protected
CP: California Fully Protected
CSC: California Species of Special Concern
♦ Watch List Species

Special-Status Habitats

Special-status habitat types are vegetation communities that support concentrations of sensitive plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although sensitive habitats are not necessarily afforded legal protection unless they support protected species, potential impacts to them may increase concerns and mitigation suggestions by resources agencies. No native or special-status habitats were recorded on the subject site due to long-standing site disturbances.

Wildlife Movement Corridors

The proposed project site is surrounded by existing development, and therefore, the subject site does not occupy an important location relative to regional wildlife movement. As such, development of the site would not be expected to have any substantial effect on local or regional wildlife movement.

Discussion

The level of constraint that a sensitive biological resource would pose to potential development typically depends on the following criteria: (1) the relative value of that resource; (2) the amount or degree of impact to the resource; (3) whether or not impacts to the resource would be in violation of state and/or federal regulations or laws; (4) whether or not impacts to the resource would require permitting by resource agencies; and (5) the degree to which impacts on the resource would otherwise be considered "significant" under CEQA. On-site habitats have been assigned a relatively low biological constraint rating based on the degree in which expected impacts to on-site resources would meet the criteria discussed above. This designation is primarily due to the high level of site disturbances (associated with impacts from recurring discing and/or other anthropogenic development disturbances) resulting in low biological diversity (i.e., replacement and exclusion of most native species with just a few non-native species) and an overall low potential for special-status species to utilize or reside within areas proposed for development due to absence of suitable habitat.

No ***special-status plant species*** are expected on site due to lack of suitable habitat. The intent of the botanical survey was to generally evaluate the potential of the site to support sensitive plant species based on existing site conditions and habitat types present. Long-standing weed abatement and other anthropogenic disturbances have likely altered soil chemistry and other substrate characteristics such that on-site soils may not currently be capable of supporting most sensitive plant species known from the site vicinity. Site development would not eliminate significant amounts of habitat for potentially occurring special-status plant species, nor reduce population size of sensitive plant species below self-sustaining levels on a local or regional basis (if present). No CEQA significant impacts are expected.

No ***special-status wildlife species*** were directly recorded on site and no special-status wildlife have a high occurrence potential due to existing disturbed site conditions and surrounding development. The site does provide marginal foraging/nesting habitat for the loggerhead shrike and Cooper's hawk, as well as potential foraging habitat for the California horned lark. Impacts to non-native grassland/ruderal areas (non-sensitive habitat types in general) and an expected low number of individuals displaced (if any) could amount to an incremental reduction of these species and potential foraging/nesting habitat that could be considered locally adverse (if present on site during construction). However, site development would not eliminate significant amounts of habitat for these special-status species, nor reduce population size below self-sustaining levels on a local or regional basis. No CEQA significant impacts are expected.

No direct observations or ***burrowing owl*** sign (feathers, pellets, fecal material, prey remains, etc.) were recorded during the survey. However, California ground squirrel burrows potentially suitable to accommodate BUOW were recorded on site. None of the potential burrows inspected during the survey were determined to be currently occupied or recently used by BUOW based on the lack of observations and absence of sign around burrow entrances. Despite that fact that the site has been exposed to long-standing disturbances, the BUOW may occur in less than optimal and/or disturbed conditions. While this species and other potentially occurring native avian species are not protected by state or federal endangered species acts, BUOW (and many other potentially occurring native nesting species) are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) and CDFG Code sections 3503, 3503.5, and 3800 which prohibits take, possession, or destruction of birds, their nests or eggs (in particular raptor species). If it were later determined that active nests would be lost as a result of site-preparation, it could result in adverse impacts and would be in conflict with these regulations. Accordingly, focused and/or preconstruction BUOW surveys are recommended prior to development.

Development of the proposed project would remove disturbed ruderal fields potentially suitable for foraging by several species of ***raptors*** during winter or migration periods. Because most potentially occurring raptor species are very widespread and roam over large areas of foraging territory, these losses would amount to an incremental reduction of seasonal foraging habitat and occasional use areas that could be considered locally adverse. However, site development would not likely eliminate significant amounts of foraging habitat for these special-status species, nor reduce population size below self-sustaining levels on a local or regional basis. Foraging and breeding habitat for raptors is present in the site vicinity, including the Jurupa Hills.

Although many ***native bird species*** are not protected by state or federal/state endangered species acts, most are protected under the MBTA and CDFG Code. If it were later determined that active nests of any of special-status or native species would be lost or indirectly impacted as a result of site-preparation (e.g., grubbing, disking, tree removal, structure demolition), it could result in adverse impacts and would be in conflict with these regulations. If construction activities were proposed during the avian nesting season (generally February 1 to August 31), nesting bird surveys are recommended (and may be required by resource agencies) prior to initial development activities (generally within 7 days or preferably less). Surveys would be used to determine if active nests of species protected by the MBTA and/or CDFW are present in the construction zone or within an appropriate buffer area as part of project approval for CEQA compliance and to subsequently evaluate appropriate measures that may reduce potential adverse project-related impacts.

Compliance with the MBTA and CDFG codes would be necessary prior to development; however no special permit or approval is typically required in most instances. Development activities performed

outside of the avian breeding season would generally eliminate the need to conduct pre-activity nesting surveys for most common native species (other than BUOW) known from the site vicinity, and likely ensure that there were no constraints to construction relative to the MBTA/CDFG codes.

Conclusion

Results of the habitat suitability evaluation conducted in October 2019 indicate that habitats located within the ±33-acre site represent low biological resource values based on the degree in which expected impacts to on-site resources would meet the criteria discussed above (1-5) and the context in which they occur (e.g., highly disturbed site conditions present in a predominantly degraded and isolated environment). The existing degraded condition of the site is the direct consequence of long-standing discing/weed abatement and rural residential activities resulting in low biological diversity (e.g., dominance of non-native species), absence of special-status plant communities, and overall low potential for special-status species to utilize or reside on site. Construction activities would not be expected to directly impact federal- or state-listed threatened or endangered species, jeopardize the continued existence of listed species (or special-status species), nor directly impact designated critical habitat. Site development would also not be expected to substantially alter the diversity of plants or wildlife in the area because of current degraded site conditions. The loss of these habitats would not be expected to substantially affect special-status resources or cause a population of plant or wildlife species to drop below self-sustaining levels.

Although no native habitat types are present, and no listed species (currently protected by state or federal endangered species acts) are expected to occur due to absence of suitable habitat, the potential presence of special-status species (e.g., primarily native nesting birds) may impose some degree of constraint to development depending upon the nature of both direct and indirect impacts on these resources (if present), as well as on the particular species and seasonal timing of construction activities. During permitting procedures, certain measures (generally described in Discussion section) to avoid or further reduce potential project-related impacts to sensitive biological resources may be necessary pursuant to CEQA.

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I hereby certify that the statements and exhibits furnished herein present the data and information required for this biological survey, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief. If you have any questions regarding the results presented in this report, please don't hesitate to call.

Sincerely,

Ecological Sciences, Inc.

Scott D. Cameron
Principal Biologist

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Arborist Report

City of Fontana

Arborist Report- Jurupa Ave/Juniper Ave

Tree Evaluation

Prepared By:

711 Fee Ana Street
Placentia, CA. 92870
Job Delgadillo
ISA Certified Arborist – WE 11537A
February 25, 2020

Report Overview:

This report provides an evaluation and recommendations for a variety of tree species for a property located north of Jurupa Avenue in the City of Fontana as further described below. There are approximately (410) trees that were evaluated for this report. The purpose of this report is to provide an evaluation on the health and value of these trees in order to identify which trees should remain on the project site, either in their present location or if that is not possible, relocate to another area or removed with mitigation, if required. This report provides recommendations for any Heritage, Specimen or Significant trees located at the project site per the Fontana Municipal Code Section 28-63 through Section 28-67.

Location of Property:

This property is located in the City of Fontana, California. The site is bordered by Santa Ana Avenue, Sierra Avenue, Juniper Avenue and Jurupa Avenue.

Location of Trees:

The trees that were evaluated are located sporadically throughout the property. It seems as though majority of the trees were planted by homeowners on their own properties with the exception of a small row of Eucalyptus trees that were most likely planted as a wind break and/or as a property border.

Species, Size and Age of Trees:

There are approximately 35 different species of trees onsite. The majority of trees on the site are Eucalyptus globulus. This species of Eucalyptus are native to Australia and may have been used as a wind break, or to designate property lines. The heights of the Eucalyptus trees vary, but majority of them are approximately 50-60+ feet tall, and the average DBH (diameter at breast height) is 21”. Based on the size of the trees, it can be estimated that they are about 40-50 years old.

Throughout the site, there are several different species of trees that all seem to have been planted by homeowners. Some of these species include citrus and several palm trees. Other species

include CA Pepper (Schinus molle), Carrotwood (Cupaniopsis anacardioides), and Palm (Washingtonia filifera). A full list of species is provided below.

Species	Counts	DBH (approx.)	Height
Pinus thunbergii	3	10” – 12”	10’ – 20’
Ulmus parvifolia	4	20” – 24”	20’ – 25’
Melia azedarach	38	20” – 30”	20’ – 30’
Washingtonia robusta	22	10” – 15”	60’ – 75’
Fraxinus	16	25” – 35”	40’ – 50’
Jacaranda mimosifolia	17	15” – 25”	25’ – 45’
Juniperus	4	10” – 14”	8’ – 12’
Eucalyptus globulus	49	18” – 28”	50’ – 60’
Ailanthus altissima	6	3” – 7”	10’ – 15’
Cupaniopsis anacardiodes	13	10” – 12”	10’ – 15’
Schinus terebinthifolia	6	10” – 25”	15’ – 30’
Schinus molle	10	25” – 30”	30’ – 35’
Eucalyptus sideroxylon	7	10” – 15”	20’ – 30’
Ceiba speciosa	3	15” – 25”	25’ – 45’
Pinus eldarica	3	25” – 35”	50’ – 60’
Pinus halepensis	7	25” – 35”	40’ – 50’
Syagrus romanzoffiana	51	5” – 10”	10’ – 15’
Magnolia grandiflora	6	8” – 12”	10’ – 12’
Lagerstroemia	5	5” – 10”	10’ – 15’

Podocarpus	2	5” – 10”	10’ – 15’
Olea europaea	10	5” – 10”	10’ – 15’
Koelreuteria paniculata	20	7” – 15”	15’ – 20’
Juglans nigra	14	20” – 25”	20’ – 25’
Cupressus sempervirens	11	5” – 10”	15’ – 20’
Pinus canariensis	5	15” – 20”	30’ – 40’
Citrus	36	5” – 12”	10’ – 12’
Tamarix	26	7” – 20”	5’ – 20’
Araucaria heterophylla	1	10”	15’
Eriobotrya japonica	6	10” – 12”	15’ – 20’
Melaleuca	4	10” – 12”	15’ – 20’
Populus	1	12”	25’
Persea americana	1	12”	25’
Mesquite	3	7” – 12”	15’ – 20’
Phoenix dactylifera	1	18”	15’
Tipuana	1	18”	30’

Tree Health and Condition:

Majority of the trees throughout the site are in decline. Many of them are dead and a few are in fair condition. None of the Eucalyptus trees on the property have been properly maintained. Some have been improperly pruned in the past (topped) and have not had a consistent water supply. Both of these items are key in maintaining the health and longevity of any tree.

There are multiple Eastern Black Walnut trees onsite and most of them are in poor condition. Majority of these Walnut trees are dead and the rest are in severe decline. This is most likely due to no irrigation and improper maintenance which led to the infestation of pests.

The condition of the rest of the trees found on site ranges from fair to poor (or dead) condition. The fruiting trees, such as Citrus that were planted by homeowners are in fair condition. The California Pepper trees found onsite are also in fair condition. These trees can survive with little water so they have been able to live in the environment they are in. None of the trees mentioned above are candidates for relocation due to the conditions and locations they are in.

City Heritage, Significant, and Specimen Trees:

The City code (Article III, Section 28-63 Definitions) addresses protected trees in the City of Fontana. There are two types of trees that may fall under the definition of a protected tree, as noted below:

- Heritage tree - *(2) Is representative of a significant period of the city's growth or development (windrow tree, European Olive tree); …*
- Significant tree - the Juglana californica (Southern California black walnut) is listed.

The site contains 49 Eucalyptus globulus trees which some could be considered to be windrow trees. As noted previously, these trees have not been properly maintained nor have they had a consistent water supply, and some have been improperly pruned (topped). As a result, none of the Eucalyptus trees are in a condition to be preserved. There are also 10 Olea europaea (European Olive) onsite which could be considered heritage trees due to them representing a period of the city's growth or development. These Olive trees have not been properly maintained nor have proper irrigation and as a result none of these trees are in a condition to be preserved.

The site also contains 14 black walnut trees, however, these are Eastern Black Walnut (juglan nigra) trees, not Southern California Black Walnut trees. Therefore, the black walnut trees on the site do not qualify as significant trees.

Recommendations:

The vast majority of the trees onsite are currently not viable to be maintained in place. This is primarily due to the fact that they have been neglected for years. The lack of irrigation and proper tree

maintenance has resulted in numerous dead trees. Most of the remaining other trees are showing signs of decline in health. I have determined that the majority of the trees located onsite appear to be in poor condition. I recommend that any tree that is in severe decline be removed. I also recommend the removal of all dead trees since they pose potential liability should they fall. I do not recommend the relocation of any trees onsite due to the condition they are currently in.

Conclusion:

Pursuant to the Fontana Municipal Code Article II. Section 28—63, I have determined that there are no significant or specimen trees on the project site. The eucalyptus trees that could potentially be deemed heritage trees, are in severe decline or dead. None of the trees onsite are in excellent condition or have a condition rating greater than 70%.

For the trees that are currently in decent health, I recommend a three year management plan be created, and an irrigation system be installed. However, even with the tree management plan and irrigation system, the tree may not be suitable to be maintained in place. Also, if there are any changes to the existing grade, or digging for infrastructure improvements that would damage the root system of any trees, then the removal of those trees is recommended.

Should you have any questions or comments regarding this report, please feel free to contact me at your convenience at (714) 986-2400.

Respectfully,

Job Delgadillo

Certified Arborist # WE-11537A

Qualified Applicator # QAL-13357

Aerial View of Site

Eucalyptus Windrow/Property Line

Large Aleppo Pine

Dead Poplar

Dead Walnut

Palms Planted by Homeowner

Delhi Sands Flower-loving Fly Habitat Suitability Evaluation

Delhi Sands Flower-loving Fly Habitat Suitability Evaluation

±33-acre Fontana Site

Site Location:
City of Fontana
County of San Bernardino
Fontana 7.5-minute USGS Quadrangle Map
Township 1 South, Range 5 West, Section 30

Prepared for:
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REDA Acquisitions, LLC
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Newport Beach, CA 92660

Prepared by:
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Ecological Sciences, Inc.
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805.921.0583

Total Area Surveyed:
± 33 acres

Survey Conducted by:
Scott Cameron
Principal Biologist

Survey Conducted On:
October 5, 2019

Report Date:
October 20, 2019

ECOLOGICAL SCIENCES, inc.

October 20, 2019

Chad Manista
REDA Acquisitions, LLC
4450 MacArthur Blvd., Ste. 100
Newport Beach, CA 92660

SUBJECT: ***Results of a Habitat Suitability Evaluation, 33-acre Site, City of Fontana, San Bernardino County, California***

Dear Chad:

This letter report presents findings of a reconnaissance-level survey conducted to generally evaluate the suitability of a ±33-acre site to support the federally-listed endangered Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*-herein DSFF).

Introduction

The study area is regionally located in San Bernardino County, California (***Plate 1***). Specifically, the project site is located in the City of Fontana (City), generally south of Santa Ana Avenue, east of Juniper Avenue, north of Jurupa Avenue, and west of Sierra Avenue. The site occurs on the "Fontana" USGS 7.5-minute topographic map (***Plate 2***). Projects proposed in the area that contain potentially suitable habitat to support sensitive biological resources such as the DSFF must demonstrate to reviewing agencies that potential project-related impacts to sensitive biological resources are avoided or minimized. In order to meet the environmental documentation and review requirements, potentially occurring sensitive biological resources must be addressed to demonstrate the applicant's conformance to California Environmental Quality Act (CEQA) and the federal Endangered Species Act (ESA) of 1973, as amended. As such, this report is intended to provide biological information to the applicant and reviewing agencies in support of the environmental review process.

As a federally listed endangered species, the DSFF is protected under the ESA. As such, federal law prohibits "take" of listed species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. In some cases, habitat modification can constitute prohibitive "take". A section 10(a) permit is required for projects where a determination of "take" is likely to occur during a proposed non-federal activity. If the project were to require a federal permit (e.g., USACE 404 permit), the federal agency issuing the permit would consult with the FWS to determine how the action may affect the DSFF under Section 7 of the Act.

The U.S. Fish and Wildlife Service (FWS) routinely reviews environmental documentation for proposed development projects in the area, and as such, would recommend that any impacts to sensitive biological resources be adequately addressed and mitigated pursuant to the ESA and CEQA. Due to the inherent limitations of unseasonal or habitat-based data, definitive conclusions regarding the actual presence or absence of DSFF cannot be made in this evaluation, although these limitations do not affect our conclusion that the property does not contain suitable habitat for the DSFF. Accordingly, this report is intended to provide the applicant with general information relative to the potential occurrence of DSFF based solely on the nature and condition of habitat present.

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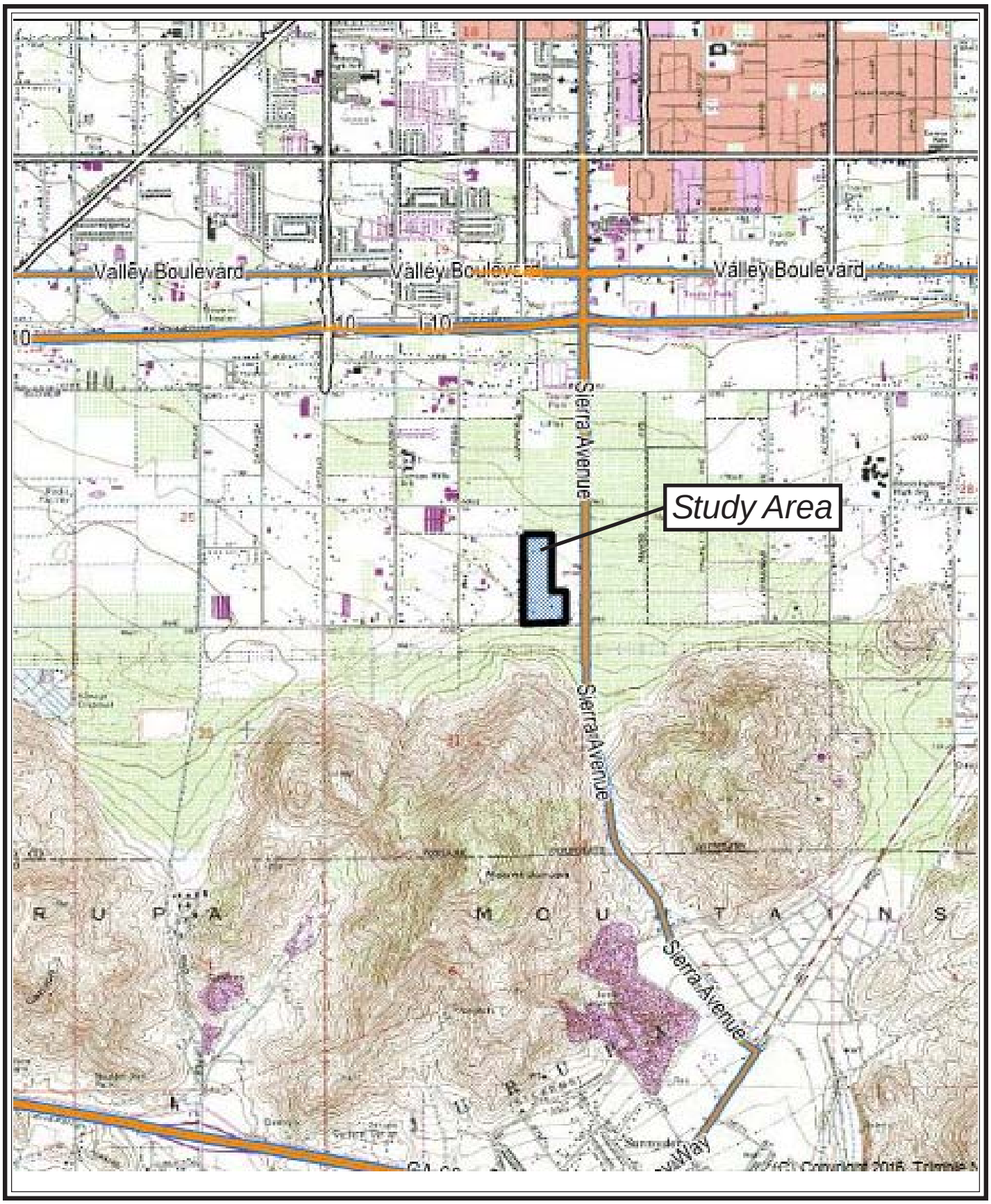

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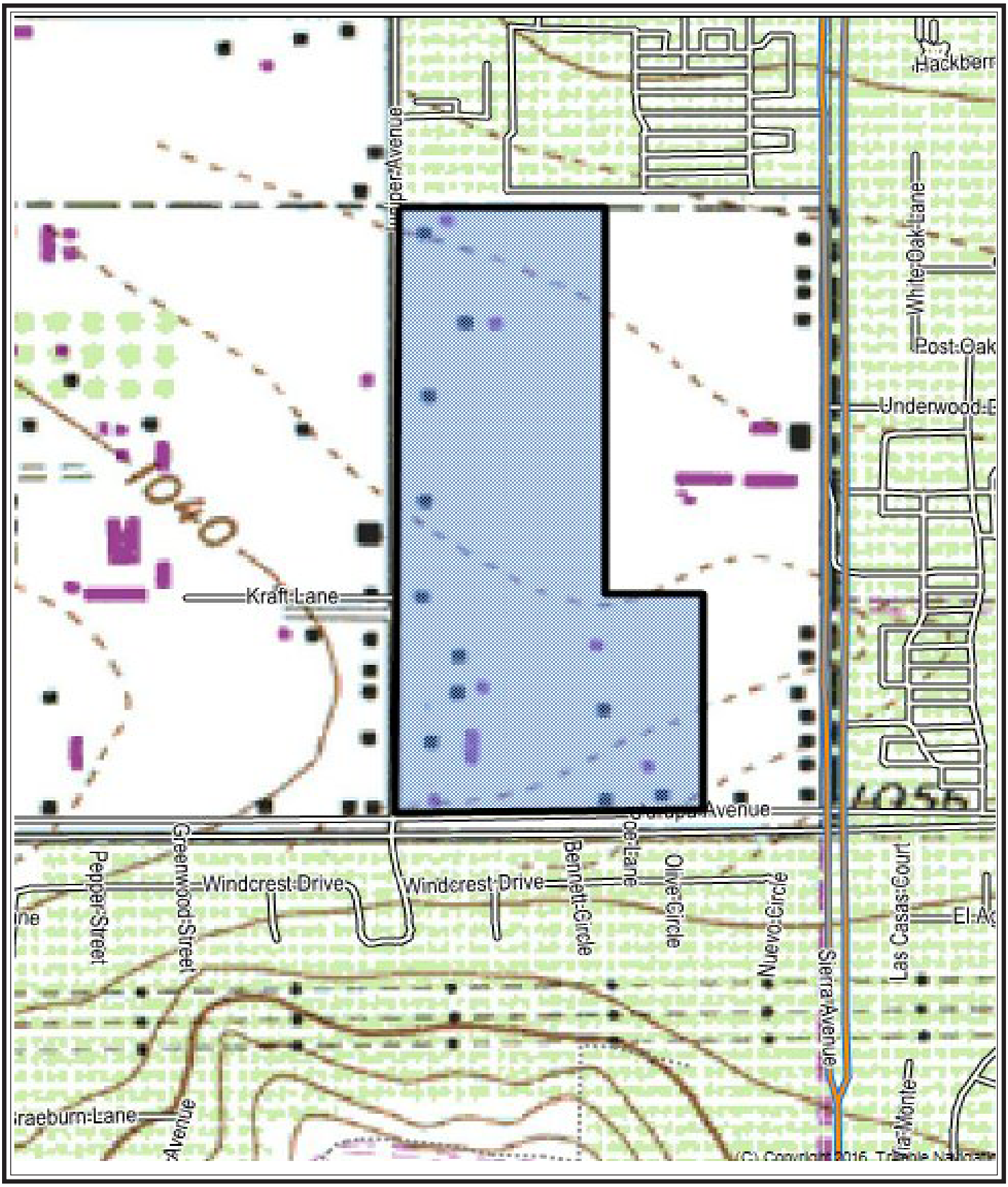
plate **1**

Regional Site Location

33-acre Fontana Site



= Study Area Boundary

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plate **2**

Site Vicinity

33-acre Fontana Site

Selected Species Overview

The FWS listed the DSFF as an endangered species on September 23, 1993. This species is only known to occur in association with Delhi sand deposits (USFWS 1997), primarily on twelve disjunct sites within a radius of about eight miles in the cities of Colton, Rialto, and Fontana in southwestern San Bernardino and northwestern Riverside counties. However, survey data indicates that DSFF occur in low numbers in Ontario, and also in sub-optimal habitat conditions. The DSFF is restricted to the Colton Dunes, which covers approximately 40 square miles. More than 95 percent of the formerly known habitat has been converted to human uses or severely affected by human activities, rendering it apparently unsuitable for occupation by the species (Smith 1993, USFWS 1997 in Kingsley 1996).

General Habitat Characteristics

Areas containing sandy substrates with a sparse cover of perennial shrubs and other vegetation constitute the primary habitat requirements for *Rhaphiomidas* flies (USFWS 1997). Potential habitat for the DSFF is typically defined as areas comprised of sandy soil (Delhi series) in open areas commonly dominated by three indicator plant species: California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californica*), and telegraph weed (*Heterotheca grandiflora*). Annual bur-sage (*Ambrosia acanthicarpa*), Rancher's fireweed (*Amsinckia menziesii*), autumn vinegar weed (*Lessingia glandulifera*), sapphire eriastrum (*Eriastrum sapphirinum*), primrose (*Oenothera* sp.), and Thurber's buckwheat (*Eriogonum thurberi*) are also commonly present at occupied DSFF sites. In addition, insect indicator species such as *Apiocera* and *Nemomydas* are also typically associated with occupied DSFF habitat. It is also important to note that the presence or absence of indicator species does not determine presence/absence of DSFF. Rather, these indicator species exhibit a strong correlation to habitats occupied by DSFF. A gradient of habitat suitability exists for DSFF, composed of varying degrees of both natural and artificial conditions.

Federal DSF Recovery Units / Core Reserves

Subregional areas encompassing smaller areas known to be inhabited by the DSFF or encompassing areas that contain restorable habitat for the DSFF have been grouped into three Recovery Units (RUs) by the FWS based on geographic proximity, similarity of habitat, and potential genetic exchange (USFWS 1997). The subject site is located within an area designated as the Jurupa RU. The Jurupa RU historically contained a large block of the Colton Dunes; however, most lands in this RU have been converted to agriculture, or developed for commercial and residential projects (USFWS 1997). The Jurupa RU contains several areas that currently support DSFF, and additional areas have been proposed for restoration in the DSFF Recovery Plan. The occupied and/or potentially restorable habitat in the RUs includes only those areas that, at a minimum, contain Delhi Series soils. Further, RUs do not include residential and commercial development, or areas that have been otherwise permanently altered by human actions (USFWS 1997). DSFF will continue to exist in the Jurupa RU only with land conservation, a cessation of current habitat-degrading land management practices and recreational uses, and/or a restoration or natural reversion of ecologically damaged lands back to an ecological community typical of Delhi sands formations.

Potentially suitable habitats remaining in the Jurupa RU are highly fragmented, and as such, the establishment of a permanent long-term reserve in this RU will require additional data on reproduction and mortality rates, dispersal, and habitat variables before further refinement of RU boundaries, development of alternative RU preserve designs, and analyses of population can be made (USFWS 1997). Until such data is obtained, the highest priority will be to protect existing populations of the DSFF (USFWS 1997). To achieve downlisting, areas containing occupied and/or restorable habitat and dispersal corridors need to be evaluated relative to the extent of distribution patterns necessary to support secure populations. Sites to be protected should be selected based on habitat needs of adults and larvae, and willingness of landowners to participate in recovery efforts (USFWS 1997). Several "Core Reserve Areas" have been initially identified by the FWS, but to our knowledge, the actual extent of the proposed reserve areas has not been finalized.

Focused DSFF Survey Guidelines

The FWS prepared Presence/Absence Survey Guidelines for the DSFF in December 1996 (FWS 1996), with revisions in April 2004. In general, the guidelines maintain that in order to more fully determine the presence or absence of DSFF such that the results are acceptable to the FWS, a survey following these guidelines must be conducted. The guidelines require that surveys be conducted in all areas containing Delhi sands twice weekly (two days per week) during the single annual flight period from July 1 to September 20. However, at the discretion of the FWS, survey guidelines may be modified depending upon individual site circumstances (e.g., highly degraded sites that don't support constituent elements of potential DSFF habitat or early seasonal emergence periods). During the environmental review process, recommendations to perform focused DSFF surveys are evaluated by reviewing agencies on a site-by-site basis.

Methodology

Literature Search

Documentation pertinent to the biological resources in the vicinity of the site was reviewed and analyzed. Information reviewed included: (1) the Federal Register listing package for the federally listed endangered DSFF; (2) literature pertaining to habitat requirements of DSFF; (3) the California Natural Diversity Data Base (CNDDB 2019) information regarding sensitive species potentially occurring on the site for the "Fontana" USGS 7.5-minute quadrangle map, and (4) review of any available reports from the general vicinity of the site.

2019 Habitat-Suitability Evaluation

Ecological Sciences conducted a reconnaissance-level field survey on the subject site to evaluate potential habitat for DSFF on October 5, 2019. The survey was conducted by Scott Cameron, Principal Biologist of Ecological Sciences, Inc. Ecological Sciences biologists have observed numerous DSFF in the field since 1995, and have extensive experience (20+ years) conducting both focused surveys and habitat evaluations for this sensitive taxon. Ecological Sciences is well versed with the biotic characteristics of a range of habitats occupied by DSFF, as well as other sensitive wildlife species potentially occurring in the area. The site was examined on foot (transects) where access allowed. Several locked gates required binoculars for assessment. Dominant plant species and soils, as well as other habitat characteristics present at the site were identified/evaluated to assess the overall habitat value. Weather conditions included relatively clear skies, 1-2 breezes, and ambient temperatures of 73-75ºF.

Existing Biological Environment

The study area is primarily characterized by rural residential development, agriculture, and other anthropogenic activities. Because of substantial and long-standing impacts, the vegetative component is mostly ruderal with ornamental species. Residential structures (occupied and abandoned), out buildings, gravel parking areas, disced fields, equestrian areas, corals, vacant fields, irrigated pastures, nurseries, cultivated lawns, and agricultural occur throughout the study area. Extensive debris dumping is evident throughout the site. Surrounding land uses include areas similar to the subject site such as agricultural, residential, and commercial. ***Plate 3*** schematically illustrates site features. ***Plates 4a-4c*** illustrate representative habitat types present on site.

Vegetation

Ruderal plants recorded included various non-native grasses and weedy species such as foxtail chess (*Bromus madritensis spp. rubens*), ripgut grass (*Bromus diandrus*), Russian thistle (*Salsola tragus*), mustard (*Brassica/Hirschfeldia* spp.), cheeseweed (*Malva parviflora*), filaree (*Erodium sp.*), common sow thistle (*Sonchus oleraceus*), pigweed (*Amaranthus albus*), jimsonweed (*Datura wrightii*), castor bean (*Ricinus communis*), fleabane (*Conyza bonariensis),* and oleander (*Nerium oleander*). Native species

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= Study Area
= Dense Ruderal
= Ruderal
= Nursery
= Rural Residential
= Scraped/Disced

plate **3**

Site Features Schematic

33-acre Fontana Site

View to south

View to east

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plate **4a**

Site Photographs

33-acre Fontana Site

View to north

View to west

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plate **4b**

Site Photographs

33-acre Fontana Site

View to east

View to west

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plate **4c**

Site Photographs

33-acre Fontana Site

such as telegraph weed (*Heterotheca grandiflora*), California croton (*Croton californicus*), dove weed (*Croton setiger*), horseweed (*Conyza canadensis*), and common sunflower (*Helianthus annuus*) were also recorded. Exotic or cultivars recorded on site included gum trees and windrows (*Eucalyptus* spp.), pepper trees (*Schinus molle*), olive (*Olea* sp.), palms (*Washingtonia* sp. and *Phoenix* sp.), pines (*Pinus* spp.), juniper (*Juniperus* spp.), salt cedar (*Tamarix* sp.), sweet gum (*Liquidambar styraciflua*), tree-of-heaven (*Ailanthus glandulosa*), and many other ornamental species. Vegetative cover was mostly dense (90-100%) absent the scraped/disced areas that were mostly barren..

General Soils Analysis / Soil Conservation Map Review

A review of soil maps prepared for the area by the Natural Resource Conservation Service (NRCS 2019) indicate that the subject site is located within an area mapped entirely as containing Delhi fine sands (Db). Various long-standing anthropogenic site disturbances have significantly altered the site's mapped surface soil characteristics. A general soils analysis was conducted due to the close association of DSFF to mostly open, sandy friable soils.

Discussion

DSFF have relatively narrow habitat requirements that are determined by appropriate plant species and open sand as defining characteristics (Kingsley 1996). It has long been established that a gradient of suitability exists composed of varying degrees of natural and artificial conditions. Observations such as the DSFFs apparent avoidance of dense (both native and non-native) vegetation (>75% coverage) or general avoidance of vegetation that is sparse or not present at all (<5% coverage) appear to suggest that DSFF generally select habitats with a combination of some vegetation, including several species of plants, and some open space with bare sand (Kiyani 1996). The presence of Delhi soils appears to be the most determinative factor of whether an area can provide suitable DSFF habitat. Delhi sands constitute the primary component of a complex ecosystem. A variety of microhabitat characteristics generally constitute potential DSFF habitat (e.g., Delhi soils, vegetation composition, soil chemistry, topography, percent vegetative cover, frequency of non-native plant species, exposure to disturbances, etc.).

While the aforementioned microhabitat conditions are considered optimal/essential to support DSFF, DSFF sometimes occur in areas not typically considered suitable for this taxon. Although individual DSFF have been recorded from sites supporting mostly ruderal, non-native vegetation, most known DSFF-occupied sites contain areas, or are adjacent to areas, of relatively undisturbed exposed patches of friable, sandy soils in association with selected native plant species. History of DSFF colony sites indicates that previously disturbed (by grading, certain types of agriculture, etc.) Delhi sands formations may revert over a few years (through erosion, aeolian processes, fossorial animal activity, and natural vegetative succession) back to conditions capable of supporting DSFF populations. However, these natural processes are dependent upon a cessation of disturbance-related land uses, which prevent the natural reestablishment of a more characteristic Delhi sand community (associated with potential DSFF habitat).

Absent changes in existing land uses, or implementation of an extensive revegetation/restoration effort, the establishment of a more characteristic Delhi sand community (associated with potential DSFF habitat) within the study area would be prevented due to deleterious changes in soil chemistry and/or recurring soil disturbances associated with long standing and routine dairy/agricultural operations. Approaches to habitat restoration would vary from simple, relatively inexpensive, and predictably successful (in cases of enhancing partially occupied sites that are weed overgrown) to complex, costly, and unpredictable (in cases of manured or imported fill sites). Disruption of substrate is deleterious to DSFF habitat because it destroys the cryptoflora crust, which is important to resisting microorganisms and maintaining ecosystem integrity (Belnap 1994 in FWS 1997).

There is no connectivity to the subject site from the nearest known (to us) DSFF population (Jurupa Hills Population to the south) due to the presence of existing development that entirely surrounds the site. While this species likely has the capability of dispersing over relatively large distances of seemingly

unsuitable habitats under certain circumstances, it would be reasonable to assume (based on our current knowledge of the species) that the likelihood of DSFF dispersing to the subject site from the nearest known off-site occupied (or historically occupied) site would be extremely low despite the fact that variables such as the length, width, and structural characteristics of dispersal corridors are not fully understood. Accordingly, the subject site would not be considered a viable property for preservation or restoration due to current land use, absence of suitable habitat, geographic location. Development isolation from undeveloped areas or areas supporting DSFF populations, and surrounding land uses which have long since fragmented potential DSFF habitat in the area.

Conclusion

Based on results of the October 2019 DSFF habitat suitability evaluation, existing conditions present within the study area are not consistent with those known or expected to support DSFF. No exposed natural or semi-natural open areas with unconsolidated wind-worked granitic soils or dunes are present. Exposure to intensive and recurring substrate disturbances (e.g. rural residential, agriculture) have substantial negative effects on potential DSFF habitat and prevents potentially suitable DSFF microhabitat conditions from developing. Substrate conditions are not consistent with those most often correlated with potential DSFF habitat.

Based on the current existing site conditions, the ±33-acre study area would generally be considered unsuitable for DSFF. In view of the site's highly disturbed and developed isolated condition, exposure to extensive and recurring surface disturbances, and analyses of correlative habitat information from a wide range (e.g., relatively disturbed to more natural habitats) of occupied DSFF habitats in the region, the subject site does not likely contain habitat suitable to support or sustain a viable DSFF population..

Φ

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological survey, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

Sincerely,

Ecological Sciences, Inc.

Scott D. Cameron
Principal Biologist

References

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